

## ASSESSMENT OF STRESS FACTORS IN FOREIGN OPERATIONS INVOLVING FRENCH U.N. PEACEKEEPERS

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Since the Gulf war, the French Army has been exposed to harsh stress conditions on its missions abroad with the U.N.O. It has been observed during the late missions of the French Army in ex-Yugoslavia and Rwanda, that the confrontation with the reality of death and with apocalyptic scenes have unfortunately caused many psychological and emotional traumas. Based on these disturbing facts the Central Authority of the health department of the French armed forces requested our institution to assess the situation on stress factors among the units operating on assignments with UN mandate. For this purpose, a survey was conducted from March 93 to February 94, using a questionnaire designed to identify and quantify the stress factors which affect all aspects of life and work in eight units posted in Cambodia, 19 units posted in Somalia and 20 units posted in ex-Yugoslavia, totaling over 5,000 people. All of the units were operating on assignments with UN mandate.

The list of stress factors covers four major fields: life conditions, working conditions, level of risk, and support conditions. Life conditions more specifically focus on stress factors linked to hygiene, food, rest and sleep, physical activities, the constraints of social life, namely promiscuity, as well as free time and leaves. Working conditions relate to working hours and the daily amount of time dedicated to work, the pace of work, the work burden, ergonomic issues, group cohesion, conflicts within the personnel, and lastly certain specific constraints such as wearing the NBC outfit for instance. Risk conditions deal with the nature of the assignment and the level of involvement in the conflict but also with how severe harassment is, with assessing the risks of injury and death and the protection capabilities. Lastly, support tackles stress factors related to medical assistance, support from the hierarchy and trusting the leaders, logistic support, and finally, support from and relationship with the family, politicians, the nation, and the local populations. Besides the above-mentioned qualitative aspects, the level of stress was quantified for each of the four investigated fields on a six-point ordinal scale. A fifth scale was devised for overall stress assessment. It is equal to the average of the four other scales.

### Results

#### A - Quantitative evaluation of stress

A statistical comparison between the stress levels recorded in the three countries reveals significant differences (Figure 1). Ex-Yugoslavia has the significantly highest total stress level ( $p < .02$ ), followed by Cambodia and Somalia. A separate analysis of the four corresponding scales shows that it is in the field of risks that ex-Yugoslavia has the significantly highest stress record ( $p < .003$ ), followed by Somalia and Cambodia. It should be noted that Cambodia has the significantly highest record for stress related to working conditions ( $p < .05$ ), followed by ex-Yugoslavia -- with an almost equivalent

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figure -- and Somalia. This result may be explained by the political and administrative nature of the assignment on the Cambodian site, for which the military probably received insufficient preparation.



Figure 1: Quantitative evaluation of stress in the three countries.

In Somalia, we have compared the results of the survey filled out at six-month (figure 2). The comparison shows that the risk-related stress level is significantly higher in summer than in winter ( $p < .05$ ). This is consistent with the nature of the assignment which, in summer -- i.e., at the beginning -- was of a predominantly military nature while it became more humanitarian-oriented later on in winter. Conversely, it should be noted that the stress related to working conditions is significantly higher during the humanitarian phase than during the earlier military phase ( $p < .05$ ). Thus, the stress related to risks of injury or death decreased over time as the work-related stress was increasing, probably owing to the fact that humanitarian action was being stepped up while sanitary conditions and food were particularly disastrous in the country.



Figure 2: Quantitative evaluation of stress in Somalia at the two periods under consideration. In summer, the assignment was of a predominantly military nature, while in winter it was predominantly humanitarian.

In ex-Yugoslavia (Figure 3), we compared the results obtained in Sarajevo -- a particularly violent site over the year of 1993 -- to those collected on other posting sites for French units, such as Bihac for instance. These data show that the stress related to life conditions is significantly higher in Sarajevo than elsewhere ( $p < .001$ ). This is also true for risk conditions ( $p < .003$ ). These results confirm the worrying data which gave rise to the decision to conduct this survey.



Figure 3: Quantitative evaluation of stress in ex-Yugoslavia. The chart compares Sarajevo to other posting sites of the French Units.

## B - Qualitative evaluation of stress

### 1. Life conditions

In Cambodia, major stress factors were harsh rest conditions. Harsh temperatures, lack of sleep and difficult (if not absent) conditions for leisure-time activities were mentioned too. In Somalia, the lack of privacy and the bad conditions for leisure-time activities were the first factors of stress (85 % mention it). 50% of the units complain about the lack of fresh products and about the harshness of the climate, noise, inappropriate lighting and confinement. In ex-Yugoslavia, all areas were mentioned. However, the first factors of stress mentioned by more than 80% of the units were the over populated social context, the isolation and bad sleeping-conditions (bad bedding, noise). Many units suffer from fresh products shortages, bad environmental conditions such as a harsh climate in winter, bad lighting and confinement. Restriction of physical activities, the lack of space and difficult conditions for leisure-time activities were mentioned too.

### 2. Working conditions

In Cambodia, factors of stress come from an overload of work or sometimes from "underload" of work and from problems of cohesion. Indeed 50% of the units mention interpersonal conflicts. In Somalia, factors of stress come from an overload of work. For some, it has to do with an unstable working-pace with night interventions and 24-hour-shifts. More than 50% complain about interpersonal conflicts and bad organization when operating. In ex-Yugoslavia, answers are more diverse. Actually, they reflect more or less the diversity of each unit's mission. Between 15 and 25% have working problems such as too much work, unstable rhythm. 40% complain about hard environmental conditions and mention interpersonal conflicts. The obligation to wear safety helmets and waistcoats is also considered as a stress factor by 35% of the units.

### 3. Risk level

In Cambodia, half of the units mention protection problems, including the lack of shelters and bad evacuation conditions. In Somalia, the lack of shelters and protection is also *alluded* to; 70% of the units also refer to harassing risks of injuries and death. In ex-Yugoslavia, answers pretty much depend on the location. However, records of people killed or injured are enough to explain why answers collected in ex-Yugoslavia were very negative. 55% of the units are under frequent or permanent light weapons or mortar attacks. The impossibility to fight back is also cited as a factor of stress by 20% of the units.

### 4. Conditions of support

The same level of stress was observed in the different countries. Thus, the lack of medical assistance and sometimes evacuation problems were frequently mentioned. The problems with fresh-supplies was evoked too. More than 40% of the units refer to a lack of support from their superiors or a lack of confidence in those in command at the U.N.O. Finally, around 50% denounce the lack of support from the nation, from the

politicians or even from the family as well as the little amount of mail. In ex-Yugoslavia, 30% mention that they feel victims of the hostility of local populations.

### Discussion and conclusion

These results show both negative factors that can increase the stress level and positive factors that can reduce it. Concerning negative stress factors, for both Cambodia and ex-Yugoslavia, leaves in France greatly alter the soldiers' mood and motivation when they come back. Situations of stress demand a great deal of energy to preserve a certain psychological and physiological stability. Defense mechanisms lose their efficiency when on leave which makes it harder for soldiers to readjust to a tensed environment. In Cambodia, some units say they fall victim to a sort of "psychological war", which leads them to such aggressive behaviors as fights and drinking habits. Another negative factor of stress mentioned in ex-Yugoslavia was the hostility of local populations towards passive, vulnerable U.N.O. forces who are forbidden to fight back. Many say they felt humiliated. The lack of communication between those in command and soldiers as well as hierarchy problems are also mentioned as stress factors in ex-Yugoslavia. In Cambodia, some say the aim of their mission was not correctly explained so that they became weary and felt useless. The same themes are mentioned in Somalia.

Among positive stress factors, relationships with some local populations have helped decrease the amount of stress. In Cambodia, some sort of help was organized to favor relationships: Classes were started to help local populations understand the French language, and a local hospital was rebuilt. In Somalia, the local population's behavior has evolved with time. People are more and more thankful for the help the U.N.O. provides. Good relationships with the family, good political and national support are considered as a help to reduce stress on the whole. All the social aspects involved in a military context (talking, eating, etc.) are also a good help to reduce stress.

Another positive element is training. Indeed, the units that have been once implicated in missions of the same nature say they are more efficient and less stressed. The training and the autonomy of command seem to be a determining factor to face extreme environments and stress. A last positive element is the heroic aspect of the job which is a quite positive motivation. The feeling of being involved in a historical event or a beneficial humanitarian mission can help. That is why active and "hands-on" missions are vital to reduce stress generated by an overly passive attitude.

In conclusion, four comments may be proposed. First, the survey shows that assignments under UN mandate, even of a prominently humanitarian nature, may occur under extremely difficult stress conditions for the military. Also, such assignments require specific and sufficiently extensive preparation for the men in order to prevent, to the largest extent possible, the pathogenic effects of this specific type of stress, which is different from the stress involved in conventional warfare. Indeed, the qualitative analysis of the answers collected has confirmed that stress is not reduced to military origins but to a great number of other complex factors.

Second, two elements appear as decisive in preventing the physiological, psychological, and social effects of such stress conditions. These are unit cohesion and trust in the

leaders. In this respect, the survey shows that in all countries, dual command -- military and diplomatic -- is an aggravating factor towards the individual and collective effects of stress. Cohesion and hierarchy need to be handled correctly within the units.

Third, there has to be an awareness of the presence of stress by all authorities. Both officers in charge or physicians need to learn how to recognize the various manifestations of stress so as to react accordingly. Some stress factors cannot be reduced while others can be eliminated such as hygiene problems, food and mail problems.

The last comment concerns the time spent on the mission site. Indeed, we should remember that the time of resistance to stress before the first decompensation phenomena occur depends on the level of solicitation experienced by the subject. The higher the stress, the earlier the physiological and psychological exhaustion phenomena. In other words, the rigid U.N.O. administrative rules which set a six-month term for assignments -- before this survey has been conducted, today it is four month -- whatever the nature of the mission, should be replaced by rules based on the appraisal of human costs in order to most efficiently prevent the short, medium and long term adverse effects on the mental and physical health of men.

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